

## **ABSTRACT**

A network of wireless nodes transmit electromagnetic signals, typically in the radio frequency (RF) mode, or at other frequencies. Multiple infrastructure nodes pick up the signals transmitted by each wireless node. The signals are combined to estimate the actual signal transmitted by the wireless node, such as a leaf node sensor. Many different diversity techniques may be used to combine the signals. In one embodiment, maximal ratio combining, equal gain combining, selection combining or switching combining is used to combine the signals.